



## **2007 Virginia Water Quality Improvement Fund Request for Proposals**

**Funding for Nonpoint Source Water Quality Improvement Grants**

DCR Document #: DCR199-166

**Issued By:**

Virginia Department of Conservation and Recreation  
Division of Soil & Water Conservation  
203 Governor Street, Suite 203  
Richmond, VA 23225

**RFP and Grant Awards Timeline:**

February 15, 2007	Issue request for proposals
March 5 - 14, 2007	Regional workshops hosted
May 15, 2007	Deadline for submitting applications and proposals
August 2007	Target date for WQIF award decisions and public posting
October 1, 2007	Target date to begin executing WQIF project agreements
December 31, 2009	Target completion date for all project awards

# 2007 Virginia Water Quality Improvement Fund DCR Request for Proposals

## Funding for Nonpoint Source Water Quality Improvement Grants

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## I. PURPOSE AND BACKGROUND

The purpose of this Request for Proposals (RFP) is to solicit applications and proposals to establish grant agreements through competitive negotiation for nonpoint source water quality improvement grants. As authorized in the *Code of Virginia, Water Quality Improvement Act* and through the *Water Quality Improvement Fund Guidelines* (WQIF Guidelines), the Virginia Department of Conservation and Recreation (DCR) is making grant funding available, through a competitive process, to support projects that will result in nonpoint source pollution reductions.

Funding is available statewide for projects supporting nonpoint source (NPS) pollution reduction initiatives on urban, suburban, and rural developed lands. Eligible NPS implementation activities included in this RFP reflect priorities of the Virginia DCR NPS programs. Funding will be targeted to projects that focus on the restoration of streams that fail to meet state water quality standards, or that support protection or restoration of other priority waters such as those containing critical habitat or drinking water sources. Within the Chesapeake Bay drainage area, projects should support local water quality programs that implement one or more elements of a Tributary Strategy to address nutrient or sediment reductions to the Chesapeake Bay.

## II. ELIGIBLE APPLICANTS, AVAILABLE FUNDING, ELIGIBLE ACTIVITIES

Through this request for proposals DCR intends to award funding for nonpoint source water quality improvement grants under two WQIF programs identified in the WQIF Guidelines: Strategic Nonpoint Source Water Quality Initiatives, and Cooperative Nonpoint Source Pollution Programs with Local Governments. All proposals submitted for funding consideration must provide for nonpoint source pollution reductions, which are most often achieved through on-the-ground implementation activities. Where available, applications are asked to provide estimated NPS reductions and other quantifiable outputs that will result from the project. Priorities for nonpoint source WQIF grants are identified below and are also reflected in Section V, "Evaluation and Award Criteria" on page 10 of this RFP.

- Projects with the highest NPS reductions compared to the dollars requested.
- Projects with implementation activities targeted to addressing TMDL impairments.
- Projects addressing Tributary Strategy implementation that exceed existing regulations and site requirements to achieve higher NPS reductions.

### **Eligible Applicants**

Local governments including **cities, counties, towns, soil and water conservation districts, and planning district commissions** as well as **state agencies, nonprofit organizations, educational institutions and individuals** (defined as any corporation, foundation, association or partnership of one or more persons) are eligible for NPS water quality improvement grants to be awarded through this request for proposals.

### **Available funding & match requirement**

Approximately \$3.5 million in funding is available for distribution statewide for WQIF nonpoint source water quality improvement grants. As established by the WQIF Guidelines the funding is split 60/40 percent between the geographic regions of the Virginia Chesapeake Bay Watershed (~\$2,100,000) and Southern Rivers Watersheds of Virginia (~\$1,400,000).

The award range for these WQIF grants is a **\$25,000 minimum** and **\$200,000 maximum** for all eligible projects. Projects are expected to have at least a 50% match of the total project costs of in-kind or cash contributions (at least 1:1 match). Additional guidelines on meeting match requirements are provided in the RFP Attachment B, "Budget Narrative Guidelines". The earliest WQIF funding may be made available for a project is October 1, 2007, which is the target date to being executing WQIF project grant agreements. All proposals must provide for a defined project period for expenditure of funds by December 31, 2009. DCR does not intend to offer extensions to any WQIA project grants awarded under this RFP.

### **Activities not eligible for funding**

Activities that are not eligible and that will not be supported with WQIF funding include:

- WQIF funding will not be used to pay for on-going staff to implement local programs that are required by law (e.g. Chesapeake Bay Preservation Act, Stormwater Management Program, Erosion & Sediment Control Program, Municipal Separate Storm Sewer System Permit Program.)
- Projects to be completed in order to satisfy an enforcement action are not eligible.
- Sanitary sewer system improvements including sewer line extensions are not eligible.
- Illegal dumpsite cleanups will not be funded.
- Agricultural BMPs are not eligible for funding unless stated otherwise (e.g. TMDL residential septic practices, and BMPs installed to address small acreage horse facilities will be considered for funding). Substantial WQIF funding support for Virginia's Agricultural BMP Cost-Share program is made available under a separate program coordinated by Virginia's Soil and Water Conservation Districts.
- Non-implementation activities such as GIS and database development, and stormwater management and watershed management studies will not be funded.
- Funding will not be used for agency operating expenses or for purposes of replacing or otherwise reducing any general, nongeneral, or special funds allocated or appropriated to any state agency; however, a grant may be awarded to a local government for efforts undertaken on lands owned by the Commonwealth and leased to a local government.

### **Eligible implementation activities**

Eligible nonpoint source pollution reduction project categories are identified below. The list includes priority types of projects DCR expects to fund under this RFP and includes a description of the eligible activities. Other nonpoint source water quality improvement project ideas that fall within the listed project categories or project areas, but that are not specifically described, will also be considered for funding.

Key to coding used in this section:

- *NPS Results* – A statement in *italics* follows the descriptions of eligible project activities to provide clarifications on quantifiable data that DCR expects to be included under Section 5, “NPS Results & NPS Pollution Reduction Estimates” on page A-4 of the 2007 WQIF Application Form.
- \*TMDL - A chart of targeted TMDL impaired segments identifying the eligible activities DCR expects to fund under this RFP is provided in Attachment C, “Targeted TMDL Impaired Segments & Eligible WQIF RFP Categories”. Project categories and priority type of projects marked below with an asterisk and the prefix “TMDL -” (i.e. \*TMDL-SWM, \*TMDL-Septic, \*TMDL-Mining, and \*TMDL-Stream Restoration) are reflected in Attachment C. NPS activities in these same project categories that are not in the targeted TMDL impaired segments will also be considered for funding.

**A. Stormwater management (\* TMDL-Stormwater Management)**

- Retrofit existing detention facilities to provide for water quality treatment. Convert a dry detention basin to a stormwater wetland or wet pond. Modify the outfall to create a two-stage release to better control small storms. Re-grade basin bottom to create a wetland area near the outlet or re-vegetate bottom with wetland vegetation to enhance pollutant removing. Create an aquatic shelf along the periphery to improve shoreline stabilization and enhance pollutant filtering. Excavate the pond bottom or modify the orifice plate to raise elevation of orifice, creating a pool at the bottom of the basin. Construct a sediment forebay or wetlands at the basin inlet or pipe outfall to trap and filter sediment before it enters the basin. (*NPS results – type of BMP, estimate size of BMP retrofit area, drainage area, and where possible, estimate additional NPS reductions.*)
- Retrofit existing impervious surfaces with infiltration and biofiltration BMPs. Incorporate filter strips and riparian buffers into existing development sites such as by removing or slotting curbs along the edge of parking lots and roads, routing runoff from paved areas across vegetated or forested filters. Convert vegetated aisle dividers or parking lot islands, donut cul-de-sacs, and other landscaped areas into bioretention facilities. Replace impervious paved surfaces in low traffic areas with a permeable surface that allows infiltration such as pavers, gravel, or porous concrete. (*NPS results – type of BMP, estimate size of BMP retrofit area, drainage area, and where possible, estimate additional NPS reductions.*)
- Retrofits to manage rooftop runoff near its source at large commercial or institutional sites. Disconnect building roof drains and re-direct runoff to a dry well, infiltration trench, bioretention facility, and/or a rainwater-harvesting system. Retrofit a very large or multiple conventional roofs within a jurisdiction or watershed with a vegetated roof cover or green roof. (*NPS results – type of BMP(s), estimate size of BMP retrofit area, drainage area, and where possible, estimate additional NPS reductions as a result of the retrofit.*)

- Better site design and/or low impact development principles incorporated into the final site design for a new development or redevelopment sites. DCR will only consider funding projects on publicly owned lands (e.g. schools or community centers) or projects with direct local government involvement or partnership. Grant funds may support the added engineering costs for site plans to incorporate these principals, if the applicant demonstrates that these costs will result in a site plan that exceeds existing SWM requirements, such as a plan that aims to mimic the pre-development hydrology of the site. Ideally, the new site design will be comparable in construction costs to a conventional design through reduced costs for curb and gutter, reduced grading and clearing, and etc. Projects considered for support of engineering costs will be required to provide a construction timeline and reassurance that the final design will be constructed. *(NPS results – type of BMPs – if known, estimate size of site to incorporate LID or better site design principals, drainage area, and where possible, estimate additional NPS reductions to be achieved above and beyond existing site requirements.)*
- Local stormwater management program developed and adopted by a locality not required to have a program. A commitment must be made to make the final stormwater management program consistent with the regulations currently under development, and which are expected to be approved in the future by DCR and the Soil and Water Conservation Board. The design of the program may consider incorporating an incentive based program with a utility fee structure to encourage low-impact development or principles benefiting water quality. *(NPS results – estimate average annual acres of new development expected to occur annually based on land uses identified in comprehensive plan.)*

## **B. Nutrient Management**

- Urban nutrient management planning and implementation program established within a jurisdiction or covering multiple sites within a watershed. A proposed program may address urban nutrient management on parks and athletic fields, office parks, apartment and condominium complexes, golf courses, and/or other urban landscaped areas. For example, an incentive may be offered to cover the costs to land/turf managers for a certified nutrient management planner to develop an urban nutrient management plan for the sites. This type project should include an agreement with the land/turf manager to assure that they plan to follow the site-specific fertilizer and lime recommendations, which will be based upon sound agronomic and soil-testing results. State owned lands are excluded from participation. *(NPS results – provide estimated number of sites, type of turf, and acres to be covered by urban NM plans, and estimated NPS reductions.)*
- Alternative waste management solutions such as gasification, pellitization, or struvite technologies which concentrate manure nutrients making transport or environmentally sound disposal more economical. A project may focus on the installation of several on-site bioengineering systems at poultry, swine, or dairy operations to concentrate manure nutrients and include a program for maintaining the system and addressing any regulatory considerations. A project may also focus on cooperatives or other entities that may form to implement one of the

above technologies. Waste to Energy projects must result in a significant reduction in animal manure nutrients in order to be considered for funding. A project may address the implementation of technologies that improve uniformity of manure application to land, such as use of litter conditioning equipment to enhance crop utilization of manure nutrients. *(NPS results – identify alternate use, estimate amount of dry tons of material converted.)*

### C. Residential septic systems (\* TMDL-Septic)

- Septic system replacement and repair projects that provide for the implementation of residential septic system BMPs outlined in Section VII, Total Maximum Daily Load Supplement of the *Virginia Agricultural BMP Manual* will be considered for funding. Priority residential septic practices for WQIF funding include septic tank system repair (RB-3), septic tank system installation / replacement (RB-4), and alternative on-site waste treatment system installation (RB-5). Construction of cluster wastewater system using alternative decentralized treatment technologies or other innovative systems serving multiple houses will be considered. DCR preference is for funding of systems with higher average effectiveness for achieving nitrogen reductions than a conventional septic system. A priority will be given to projects that are not currently receiving DCR funding through the Section 319 Grant for septic activities. *(NPS results – type of BMP(s), estimate number of systems to be replaced or repaired and/or homes served.)*

As of this RFP release, the 2007 General Assembly budget amendments include ~ \$15 million in DEQ WQIF allocations specifically targeted to correction of straight pipes in the Southern Rivers Watersheds. If this budget amendment is approved, projects related to replacement of straight pipes in the Southern Rivers Watersheds will not be considered for funding under this RFP.

- Establishment of a septic tank pumpout maintenance program within a county or watershed-based area, such as impaired watershed, is an eligible activity. A project may include a mechanism to track septic system maintenance, approach for notifying septic owners of the need to pump systems out, and educational materials provided to homeowners. DCR preference will be given for establishment of programs with formal adoption or ordinance by the locality causing regular septic pumpouts to become a requirement. Proposals submitted by localities in the Chesapeake Bay Preservation Act area will be considered for funding. *(NPS results – estimate annual number of systems to be pumped.)*

### D. Other WQIF NPS Funding Project Areas

- Riparian buffer protection programs designed to establish, enhance, and protect riparian buffer zones are eligible for funding. Grant funds may be used to provide an incentive to landowners for participation in permanent conservation and water quality easement acquisition programs covering lands not eligible for funding through the Virginia Conservation Reserve and Enhancement Program (CREP). CREP eligible lands are those that have been active pasture or cropland for four out of the past six years. *(NPS results – estimate liner feet and/or acres of buffer to be restored or protected, and estimated buffer drainage area.)*

- Abandoned or orphaned mine land reclamation (\*TMDL-Mining) projects to improve water quality through the restoration of past coal and mineral mining operations. Water quality impairments from past mining operations addressed through the removal of exposed refuse materials such as gob piles and tipples sites, stabilization of barren and eroding outcrops, and other reclamation activities are eligible. DCR preference is for projects addressing multiple sites or to a single site causing substantial water quality degradation in impaired stream segment(s). *(NPS results – estimate size of BMP reclamation area, nature of the reclamation activity, and where possible, estimate NPS pollution reductions to be achieved.)*
  
- Stream restoration (\*TMDL-Stream Restoration) – Projects targeted to address streams that are unstable (experiencing bank erosion or down cutting) and that will remain unstable unless active steps are taken to restore stream stability are eligible. Projects utilizing natural stream channel design are encouraged. Stream restoration projects will be evaluated based on their being part of a watershed plan or if a stream assessment has or will be conducted to determine the severity of the stream degradation problem and to determine if the stream is a good candidate for restoration. Attention will be paid to the conditions of the watershed such as impervious cover, land use patterns, flow regimes and soil types, at the site and upstream and to the restoration or rehabilitation goals. Permanent easements on stream restoration areas will be accepted as in-kind match. *(NPS results – estimate size of stream restoration area, linear feet restored, affected drainage area, and if possible, estimate pre-restoration loss of NPS pollution with historic loss timeframe that will be eliminated as a result of this project.)*
  
- Small acreage horse facilities – Proposals will be accepted for projects that address the water quality impacts from the increasing number of horse operations within a locality, region, or watershed. A project may aim to educate the horse community about water quality issues and owner responsibilities through multiple demonstration sites of best management practices from the *Virginia Agriculture BMP Manual*. Proposals that will be given the highest priority for funding are those that partner with or are sponsored by a locality in cooperation with the local soil and water conservation district, to develop an ordinance or otherwise establish a local program to reduce water quality problems associated with small acreage horse facilities through measures such as buffer requirements, set-backs from waterways, and limitations on stocking numbers per acre. *(NPS results – estimate number horse owners reached, number and type BMPs to be installed, BMP drainage area.)*

All proposals are expected to implement nonpoint source pollution reduction actions, address local and state water quality priorities, and/or expand local capacity to address NPS pollution for achieving long-term water quality benefits. DCR staff will work with successful applicants to ensure that final scopes of work address issues that arise during the proposal review process.

DCR preference is for the majority of WQIF funding to be used for construction and other costs associated with on-the-ground implementation activities. Applicants requesting project staffing costs must demonstrate that they are essential for implementation, in order to be considered. The level of essential staff funding may not exceed 20% of the total WQIF grant funds requested.



### III. GRANT AGREEMENT REQUIREMENTS & GUIDELINES

The Department of Conservation and Recreation will make use of a standard grant agreement and general terms and conditions of the Commonwealth for all Water Quality Improvement Fund projects awarded funding through this request for proposals. These documents are available for reference on the DCR WQIA website, [http://www.dcr.virginia.gov/soil\\_&\\_water/wqia.shtml](http://www.dcr.virginia.gov/soil_&_water/wqia.shtml).

Projects selected for funding will be required to provide quarterly progress reports including a final report to the assigned DCR Project Manager. Reporting guidelines are included in the standard grant agreement under Section (5) SCOPE OF SERVICE. As required in the *Water Quality Improvement Act*, all projects awarded funding through this request for proposals are required to have an Operation and Maintenance Plan. Sections (13) OPERATION AND MAINTENANCE and (14) ENFORCEMENT of the standard grant agreement address this requirement. Guidelines for Developing Operation and Maintenance Plans and other administrative and programmatic guidelines for projects awarded funding are available in the DCR Grant Project Management Manual available at [http://www.dcr.virginia.gov/soil\\_&\\_water/grants.shtml](http://www.dcr.virginia.gov/soil_&_water/grants.shtml).

### IV. PREPARATION AND SUBMISSION INSTRUCTIONS

In order to be considered for selection, project sponsors must submit a complete response to this RFP including a 2007 WQIF Application Form and a project proposal narrative. Applications and proposals missing information or that lack key information may be rejected. Applicants are required to submit **7 hard copies and one electronic version** (Microsoft Word or Adobe Acrobat PDF files are preferred) of the completed 2007 WQIF Application Form and the project proposal narrative to the Virginia Department of Conservation and Recreation **by 5:00 pm on May 15, 2007** or postmarked by this date and time. Incomplete application documents not delivered or mailed accordingly may be disqualified. Address the final application package to:

Sarah Capps, WQIA Program Manager  
Virginia Department of Conservation and Recreation  
203 Governor Street, Suite 206  
Richmond, Virginia 23219  
Email, [sarah.capps@dcr.virginia.gov](mailto:sarah.capps@dcr.virginia.gov)

## V. EVALUATION AND AWARD CRITERIA

Projects will be scored based on the evaluation criteria and the bonus points sections listed below, in order to prioritize projects for the distribution of available funds. A team of DCR and other agency or local government staff will evaluate grant applications and proposed projects. Final decisions for project selection are at the discretion of the director of DCR. All projects approved for funding through this RFP will be made available for public comment at least 30-days prior to executing grant agreements. The recommended award list will be posted for public comment on the DCR WQIA web site: [http://www.dcr.virginia.gov/soil\\_&\\_water/wqia.shtml](http://www.dcr.virginia.gov/soil_&_water/wqia.shtml).

<b>Evaluation Criteria – The following evaluation criteria apply to all proposed projects.</b>	<b>Maximum points</b>
<ul style="list-style-type: none"> <li>How many pounds of total nitrogen, phosphorus, and sediment are estimated to be reduced annually by the proposed project?</li> </ul>	25 points
<ul style="list-style-type: none"> <li>Does the project support protection or restoration of a watershed or sub-watershed that fails to meet water quality standards, or is located in a watershed containing critical habitat or drinking water sources, or other priority waters? To what extent does the project target implementation of a watershed or sub-watershed based plan with documented nutrient and sediment reduction goals or other watershed based priority restoration activities.</li> </ul>	25 points
<ul style="list-style-type: none"> <li>How cost-effectiveness is the project in achieving measurable reductions of nonpoint source pollutants and/or does the project establish a local program for long-term nonpoint source pollution reductions? In evaluating the cost-effectiveness of the project, consideration will be given to the availability of other funding for the project and the leveraging of public and private matching funds.</li> </ul>	25 points
<ul style="list-style-type: none"> <li>How well is the overall project design for meeting the proposed nonpoint source program objectives including the specific plans or methodology to be used to achieve the project objectives? Does the proposal demonstrate the capability of the project sponsor and partners in providing for the successful completion of the project (e.g. qualifications, expertise, reach within the community)?</li> </ul>	25 points
<b>Evaluation Criteria Maximum Points</b>	<b>100 points</b>

<b>Bonus Points – Proposals that fit the categories described below will be eligible to receive bonus points during the evaluation and review process.</b>	<b>Maximum bonus points</b>
<ul style="list-style-type: none"> <li>Does the project address an impaired segment and eligible RFP activity identified in the chart included in Attachment C, “Targeted TMDL Impaired Segments &amp; Eligible WQIF RFP Categories”; or does the project address other impaired segments and/or NPS project activities not included on Attachment C, but that are determined to have a TMDL Implementation Plan or that has been prioritized for development of a TMDL Implementation Plan?</li> </ul>	10 points
<ul style="list-style-type: none"> <li>Does the project builds upon a local government proposal submitted under the FY2006 WQIF Request for Grant Applications, having initially requested a long-term funding commitment, and that has demonstrated success with the FY2006 funding and the need for continued funding support for the project.</li> </ul>	10 points
<b>Maximum Bonus Points</b>	<b>20 points</b>

## VI. WORKSHOPS

Six pre-proposal workshops to promote the RFP will be held around the state between March 5 and March 14, 2007. The purpose of these workshops is to provide an opportunity to emphasize and clarify critical aspects of the RFP and application process. The workshop schedule is below. Any changes or clarifications to this schedule will be provided in advance on the DCR WQIF website, [http://www.dcr.virginia.gov/soil\\_&\\_water/wqia.shtml](http://www.dcr.virginia.gov/soil_&_water/wqia.shtml).

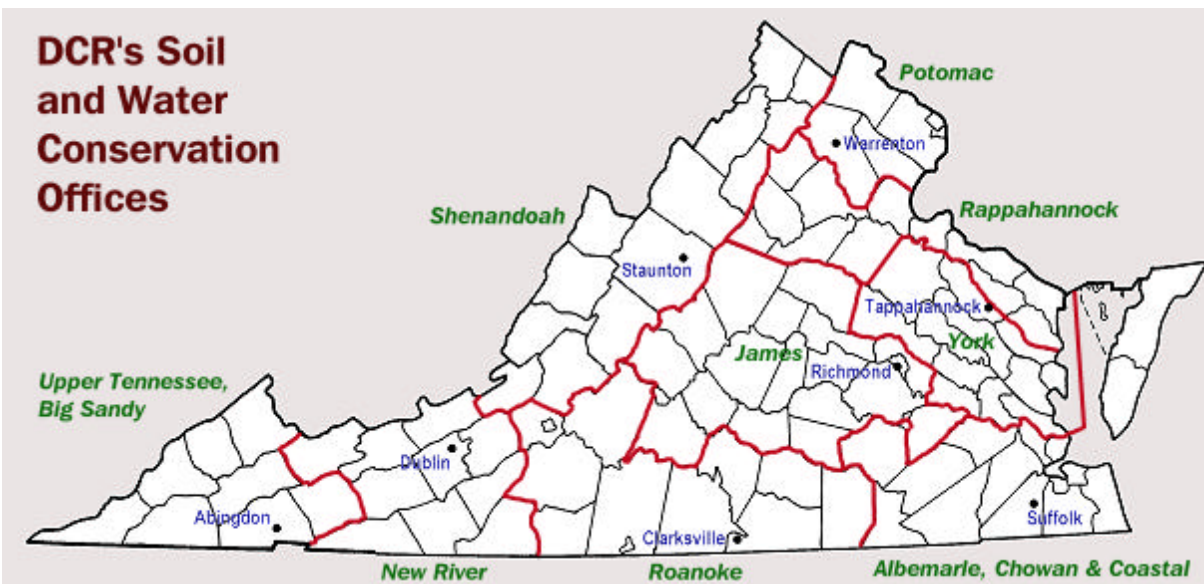
Workshop Dates	Workshop Locations
<b>Monday, March 5, 2007 1 – 3 PM</b>	<b>Marion, VA</b> – Best Western Hotel Conference Room, 1424 North Main Street, Marion, VA 24354.  <u>Directions:</u> <b>(From West)</b> Travel I-81 North to Exit 47 toward US-11 / Marion, turn left on N Main St, turn left onto US-11 / Lee Highway, travel 0.6 miles to hotel. <b>(From East)</b> Travel I-81 South to Exit 47 toward Marion, turn left onto Lee Highway / US-11, travel 0.8 miles to hotel.
<b>Tuesday, March 6, 2007 10 AM – 12 Noon</b>	<b>Lynchburg, VA</b> – Lynchburg College: Hopwood Hall Auditorium at 1501 Lakeside Drive, Lynchburg, VA 24501. Park in white spaces designated for students outside Hobbs Hall.  <u>Directions</u> and a campus map are on college website, <a href="http://www.lyncburg.edu/directions.xml">http://www.lyncburg.edu/directions.xml</a> . From 221 / Lakeside drive, turn onto College Drive which bends to the right, turn right onto Vernon Street, turn left onto College Street, turn right into Hobbs Hall parking lot (just past Knight-Capron Library). From Hobbs Hall parking lot, walk into the Dell area and then over to Hopwood.
<b>Thursday, March 8, 2007 10 – 12 Noon</b>	<b>Harrisonburg, VA</b> – Virginia Department of Transportation (VDOT) Harrisonburg Residency at 3536 North Valley Pike, Harrisonburg, VA 22802. Workshop is in the upstairs conference room.  <u>Directions:</u> Travel I-81 to Exit 251 / US-11 South toward Harrisonburg, left off ramp onto US-11 South / North Valley Pike, 0.3 miles to VDOT on left.
<b>Monday, March 12, 2007 2 – 4 PM</b>	<b>Manassas, VA</b> – Prince William County Public Library: Central Community Library at 8601 Mathis Avenue, Manassas, VA 20110. WQIF workshop is in the Community Room.  <u>Directions</u> to the facility are on the library website, <a href="http://www.pwcgov.org/default.aspx?topic=040034001030001207">http://www.pwcgov.org/default.aspx?topic=040034001030001207</a> .
<b>Tuesday, March 13, 2007 2 – 4 PM</b>	<b>Williamsburg, VA</b> – William & Mary: Campus Center at 1 Jamestown Road, Williamsburg, VA. The Campus Center is at the intersection of South Boundary St. and Jamestown Rd. (Rt. 5). WQIF workshop is in the Little Theater in the basement. Park across from Campus Center in Colonial Williamsburg P6 Parking, or in the Colonial Williamsburg P1 Parking (hourly fees).  <u>Directions</u> and a campus map are on the web, <a href="http://www.wm.edu/about/directions.php">http://www.wm.edu/about/directions.php</a> . <b>(From East)</b> I-64 West to Exit 242A / 199 West, travel ~ 3.5 miles, turn right onto South Henry St. / 132 North, pass W&M Marshall Wythe School of Law, turn into P6 Parking on left. <b>(From West)</b> I-64 East to Exit 238 toward Williamsburg, turn right at 2 <sup>nd</sup> stoplight onto Route 132 South and travel ~ 1.7 miles, after Lafayette St. intersection 132 South becomes North Henry Street, turn into either P1 Parking or P6 Parking on the right.
<b>Wednesday, March 14, 2007 10 AM – 12 Noon</b>	<b>Emporia, VA</b> – Richardson Memorial Library at 100 Spring Street, Emporia, VA 23847. Free parking at the library and in parking lot directly across the street (the Old Health Dept. Building).  <u>Directions:</u> <b>(From East)</b> Travel US -58 West to Emporia, turn left onto US-58 Bus. Rt./ East Atlantic St, left onto US-301 /North Main St, 0.6 miles to library. <b>(From North)</b> Travel I-95 South to Emporia merging onto US-58 East via Exit 11A toward Emporia, turn right onto Market Dr. which becomes W. Atlantic St. / US-58 Bus. Rt., turn right onto US-301 / North Main St., 0.6 miles to library.

## VII. DCR CONTACTS

Direct general questions regarding this request for proposals, the grant application process, project inquiries applicable to multiple watersheds or that have statewide application to:

- Sarah Capps, WQIA Program Manager – (804) 225-3785 or [sarah.capps@dcr.virginia.gov](mailto:sarah.capps@dcr.virginia.gov)

Project sponsors should contact the appropriate DCR regional office identified below to discuss specific project ideas and questions for local or regional projects. Contact the DCR regional office or Sarah Capps to request an electronic version of the 2007 WQIA Application Form.



- 1 **Abingdon** (Upper Tennessee & Big Sandy Watersheds Office)  
Kelly Miller, Regional Manager - (276) 676-5529, [kelly.miller@dcr.virginia.gov](mailto:kelly.miller@dcr.virginia.gov)
- 2 **Clarksville** (Roanoke Watershed Office)  
Dean Gall, Acting Regional Manager - (434) 374-3648, [dean.gall@dcr.virginia.gov](mailto:dean.gall@dcr.virginia.gov)
- 3 **Dublin** (New River Watershed Office)  
Dean Gall, Regional Manager - (434) 374-3648, [dean.gall@dcr.virginia.gov](mailto:dean.gall@dcr.virginia.gov)
- 4 **Richmond** (James River Watershed Office)  
Nissa Dean, Regional Manager - (804) 225-3390 or [nissa.dean@dcr.virginia.gov](mailto:nissa.dean@dcr.virginia.gov)
- 5 **Staunton** (Shenandoah Watershed Office)  
Jim Echols, Regional Manager - (540) 332-9991 or [jim.echols@dcr.virginia.gov](mailto:jim.echols@dcr.virginia.gov)
- 6 **Suffolk** (Albemarle, Chowan & Coastal Watersheds Office)  
Fran Geissler, Regional Manager - (757) 925-2392 or [fran.geissler@dcr.virginia.gov](mailto:fran.geissler@dcr.virginia.gov)
7. **Tappahannock** (York & Rappahannock Watersheds Office)  
Matt Criblez, Regional Manager - (804) 443-6752 or [matt.criblez@dcr.virginia.gov](mailto:matt.criblez@dcr.virginia.gov)
8. **Warrenton** (Potomac Watershed Office)  
Kelly Vanover, Regional Manager – (540) 347-6422 or [kelly.vanover@dcr.virginia.gov](mailto:kelly.vanover@dcr.virginia.gov)

## VIII. REFERENCES

- *Low Impact Development Technical Bulletin (Final Draft 2/8/05)*. Developed by the Virginia Low Impact Development Workgroup coordinated by the Norfolk District, Corps of Engineers Office. Available on the Wetlands Studies website, [http://www.wetlandstudies.com/docUpload/LID\\_Technical\\_Bulletin\\_Draft.pdf](http://www.wetlandstudies.com/docUpload/LID_Technical_Bulletin_Draft.pdf)
- National Small Flows Clearinghouse, [http://www.nesc.wvu.edu/nsfc/nsfc\\_index.htm](http://www.nesc.wvu.edu/nsfc/nsfc_index.htm)
- *Virginia Agriculture BMP Manual (Including Section VIII Total Maximum Daily Load Supplement)*. Published by DCR, revised May 2006. Available on the DCR website, <http://192.206.31.57/agbmpman/toc.pdf>.
- *Virginia Nutrient Management Training and Certification Regulations and the Virginia Nutrient Management Standards and Criteria*. Available on the DCR website, [http://www.dcr.virginia.gov/soil\\_&\\_water/nutmgt.shtml](http://www.dcr.virginia.gov/soil_&_water/nutmgt.shtml).
- *Virginia Stormwater Management Handbook (Volumes I and II)*. Available on the DCR website, [http://www.dcr.virginia.gov/soil\\_&\\_water/stormwat.shtml#handbook](http://www.dcr.virginia.gov/soil_&_water/stormwat.shtml#handbook), under Publications / Downloads.
- *Virginia Tributary Strategies*. Issued by W. Tayloe Murphy, Jr., Secretary of Natural Resources in January 2005. Available on the web, [www.naturalresources.virginia.gov](http://www.naturalresources.virginia.gov), click Initiatives / Virginia Water Quality and scroll to bottom.
- *Virginia Water Quality Improvement Act*. Code of Virginia, Title 10.1-Conservation, Chapter 2.1-Virginia Water Quality Improvement Act of 1997, § 10.1-2117 thru § 10.1-2134. Virginia Legislative Services website, <http://leg1.state.va.us/000/src.htm>.
- *Virginia Water Quality Improvement Fund Guidelines*. Issued by L. Preston Bryant, Jr, Secretary of Natural Resources in November 2006. Available on the DCR WQIA website, [http://www.dcr.virginia.gov/soil\\_&\\_water/wqia.shtml](http://www.dcr.virginia.gov/soil_&_water/wqia.shtml).

## IX. ATTACHMENTS

Attachment A – 2007 WQIF Application Form & Proposal Narrative Guidelines

Attachment B – Budget Narrative Guidelines

Attachment C – Targeted TMDL Impaired Segments & Eligible WQIF RFP Categories

## 2007 WQIF Application Form & Proposal Narrative Guidelines

Virginia Department of Conservation and Recreation  
Water Quality Improvement Fund

*Contact the DCR regional office or Sarah Capps for an electronic version of this application form.  
For contact information see the “DCR Contacts” section on page 12 of the 2007 WQIF RFP.*

1. APPLICANT INFORMATION				
Project Sponsor:				
Mailing Address:				
City, State, Zip:				
Federal ID #:				
Contract Person:				
- Phone:				
- E-mail:				
2. PROJECT INFORMATION				
Project Name:				
Start and End Dates:				
WQIF Grant Request and Match Funds:	\$	WQIF Request	\$	Match
Location Information:				
- City, County, Town:				
- Watershed Name*:				
- Watershed Number (NWBD)*:				
Is water body on DEQ 303(d) Impaired Waters List?**		Yes		No
Identify TMDL segment and stream:				
Identify TMDL impairment(s) addressed by this project:				
Does project address TMDL activity identified in Chart A?		Yes		No
<p>* PDF maps by county of Watershed Names and Watershed Numbers (NWBD) are available from the DCR FTP site: <a href="ftp://ftp.dcr.virginia.gov/NWBD">ftp://ftp.dcr.virginia.gov/NWBD</a>.  Username = guest  Password = c0nserv (use zero in c0nserv)</p> <p>** Details on the DEQ 303(d) Impaired Waters List including an Interactive Map are available on the DEQ website, <a href="http://www.deq.state.va.us/wqa/ir2006.html">http://www.deq.state.va.us/wqa/ir2006.html</a></p>				

### 3. ELIGIBLE WQIF NPS ACTIVITIES (Refer to [pages 3-6](#))

Mark an X to the left of the eligible WQIF NPS activity(s) proposed in the project.

#### Stormwater Management (\*TMDL -SWM)

<input type="checkbox"/>	Retrofit(s) to existing detention facilities
<input type="checkbox"/>	Retrofit(s) to existing impervious surfaces
<input type="checkbox"/>	Retrofit(s) to manage rooftop runoff
<input type="checkbox"/>	Better site design and/or low impact development
<input type="checkbox"/>	Local stormwater management program

#### Nutrient Management

<input type="checkbox"/>	Urban nutrient management planning and implementation
<input type="checkbox"/>	Alternative animal waste solutions

#### Residential Septic Systems (\*TMDL-Septic)

<input type="checkbox"/>	Septic system repair and replacement
<input type="checkbox"/>	Establishment of septic tank pumpout maintenance program

#### Other WQIF NPS Funding Priority Areas

<input type="checkbox"/>	Riparian buffer protection program
<input type="checkbox"/>	Abandoned or orphaned mine land reclamation (*TMDL-Mining)
<input type="checkbox"/>	Stream restoration (*TMDL-SR)
<input type="checkbox"/>	Small acreage horse facilities
<input type="checkbox"/>	Other: _____

#### 4. BUDGET NARRATIVE

*This section must clearly identify estimated project costs according to the budget categories provided below. Identify all expected project costs and all sources of match funds. Additional rows may be added under the budget categories to provide a line item detail. Rows for budget categories not included in the proposed project budget may be deleted. Reference the 2007 WQIF RFP Attachment B "Budget Narrative Guidelines" in completing this section.*

<b>BUDGET CATEGORIES &amp; ITEMIZED DESCRIPTION</b>	<b>WQIF Grant</b>	<b>Match Funds</b>
<b>PERSONNEL</b> <i>Personnel Subtotal→</i>	\$	\$
- (Describe Personnel)		
<b>FRINGE BENEFITS</b> <i>Fringe Subtotal→</i>	\$	\$
- (Describe Fringe Benefits)		
<b>TRAVEL</b> <i>Travel Subtotal→</i>	\$	\$
- (Describe Travel)		
<b>EQUIPMENT</b> <i>Equipment Subtotal→</i>	\$	\$
- (Describe Equipment)		
<b>SUPPLIES</b> <i>Supplies Subtotal →</i>	\$	\$
- (Describe Supplies)		
- (Describe Supplies)		
<b>CONTRACTUAL</b> <i>Contractual Subtotal→</i>	\$	\$
- (Describe Contractual)		
<b>CONSTRUCTION</b> <i>Construction Subtotal→</i>	\$	\$
- (Describe Construction)		
- (Describe Construction)		
- (Describe Construction)		
<b>OTHER DIRECT</b> <i>Other Direct Subtotal→</i>	\$	\$
- (Describe Other Direct)		
- (Describe Other Direct)		
<b>INDIRECT</b> <i>Indirect Subtotal→</i>	Not allowed	\$
- (Describe Indirect)	Not allowed	
<b>TOTAL COSTS</b>	<b>\$</b>	<b>\$</b>



## 5. NPS RESULTS & NPS POLLUTION REDUCTION ESTIMATES

BMP(s) Name and Work Description	(Specify and describe the type of BMPs to be installed, repaired, replaced, retrofitted or otherwise modified.)					
Estimate Size or Quantity of BMP(s):	(Specify targeted number of acres, linear feet, number of units or other appropriate unit for BMPs to be implemented.)					
Drainage Area: (If applicable)	(Estimate drainage area, such as acres to be treated by BMP(s) and including % acres or % of area to be treated that is pervious vs. impervious.)					
Estimated annual NPS reductions: (If possible)		Nitrogen (lbs)		Phosphorus (lbs)		Sediment ___ (lbs) ___ (tons)
	List other Pollutant(s) and reductions (e.g. Pathogens).					
Describe basis or source for NPS reduction estimates:	(e.g. SWM engineering calculations, Bay Model efficiencies, TMDL studies and implementation plans, National Small Flows standards for septic, scientific study results, manufactured BMP design specifications, etc.)					
Other NPS Results information:						

## APPLICATION & PROPOSAL SUBMISSION

Applicants are required to submit **7 hard copies and one electronic version** (Microsoft Word or Adobe Acrobat PDF files are preferred) of the completed 2007 WQIF Application Form and the project proposal narrative to the Virginia Department of Conservation and Recreation **by 5:00 pm on May 15, 2007** or postmarked by this date and time. Incomplete RFP application documents not delivered or mailed accordingly may be disqualified. Address the final application package to:

Sarah Capps, WQIA Program Manager  
 Virginia Department of Conservation and Recreation  
 203 Governor Street, Suite 206  
 Richmond, Virginia 23219  
 Email, [sarah.capps@dcr.virginia.gov](mailto:sarah.capps@dcr.virginia.gov)

## PROPOSAL NARRATIVE GUIDELINES

The project proposal narrative **must not exceed five pages (10 or 12 point font)**. Below is an outline that serves as the proposal narrative guidelines. Proposals submitted that do not follow the exact outline, will still be considered but are advised to address the same type content as presented below.

- I. **Project Abstract** – Brief description of project and NPS reduction or water quality improvement activities, and expected results or other project deliverables.
- II. **Proposal**
  - A. **Project Need** – Describe the nature of the problem and the water quality or nutrient loading concern for the selected project area to be addressed by the proposed project.
  - B. **Objectives** – Provide a bulleted or numbered list of the project’s anticipated outcomes. Be as descriptive and quantitative as possible.
  - C. **Overall Content**
    - Describe how the project will contribute toward achievement of nutrient reduction targets outlined in Virginia Tributary Strategies, TMDL Implementation Plans, or other local or watershed planning documents.
    - Describe how the project will contribute to expanding the implementation of cost-effective, innovative, or sustainable strategies for NPS reductions.
    - Describe how the project differs or goes beyond ongoing efforts to comply with legally mandated requirements at the local, state, or federal level.
    - Indicate if the project is a continuation or expansion of an existing WQIF grant funded under the FY2006 WQIF Request for Grant Applications.
  - D. **Methodology & Timeline** – Describe the project methodology including a timeline for the project implementation. Indicate if any permits may be required for the project.
  - E. **NPS Results, NPS Reductions, or Environmental Results** – This section may be used to provide additional information, beyond what is provided in the 2007 WQIF Application Form under Section 5, “NPS results & NPS Pollution Reduction Estimates”, or to identify other environmental results expected to be achieved.
  - F. **Partner Justification** – Provide a list of project partners and their roles in the project. Describe the qualification and nature of the contributions of the project sponsor organization and other collaborating organizations. Indicate level of involvement of other organizations in development and review of the proposed project.

## Budget Narrative Guidelines

### Guidelines for Completing Budget Categories

Use the following guidelines for determining budget categories for estimated project expenses. DCR grant agreements for projects awarded funding will include a Project Financial Report Form, which breaks down the project budget into these budget categories. This form will then be submitted for reimbursement request according to actual expenses within each of the budget categories.

- Personnel:** Grant funds for personnel charges should only be for staff within the project sponsors organization, and for staff members who are directly involved in the project. This category does not include contractual staff. In-kind personnel contributions from project partners may be listed as personnel under the Match funds section of the budget narrative. Use the actual annual salary or hourly wage of project staff to determine expenditures and/or match amounts based on estimated time to be spent working on the project.
- Fringe Benefits:** In the budget narrative please provide the percentage used for fringe benefits, the basis for its computation, and the types of benefits included.
- Travel:** Mileage traveled and other costs for travel including lodging and meals. Travel reimbursements are for actual costs based on organization policies, and is not to exceed those included in the *Commonwealth of Virginia Policies & Procedures, Topic No. 20335, State Travel Regulations*. A maximum vehicle mileage rate of \$0.485/mile should be used.
- Equipment:** Only equipment items valued equal to or greater than \$5,000 per unit should be reported. Items less than \$5,000 should be listed as supplies.
- Supplies:** This category includes tangible property items with a per unit cost value of less than \$5,000. Supplies must be itemized in the budget narrative.
- Contractual:** Contractual costs include subcontracted work to be completed by those other than the project sponsor. This may include design and engineering services, legal contracts, easement surveys, analysis of water samples, and etc.
- Construction:** This category includes direct costs related to installation of best management practices and other pollution control measures.
- Other Direct:** Miscellaneous items. These items must be listed in the budget narrative, in sufficient detail to determine if they are reasonable and allowable.
- Indirect:** No indirect costs will be funded. Indirect charges may be used as project match. The indirect cost rate must be documented in the match narrative.

## Matching Cost Guidelines

### WQIF Match Fund Requirement

Identify project match funds accounting for at least 50% of the total project costs (at least 1:1 match is required). Each budget category does not have to be matched at a 1:1 ratio, as long as the total match of cash and/or in-kind contributions equals the total DCR WQIF grant funds requested.

Projects demonstrating high cost-effectiveness for nutrient or sediment reductions and which demonstrate fiscal constraints of the applicant may be eligible for greater than fifty percent of the project funding. The director of DCR and the Secretary of Natural Resources will oversee requests for special consideration. Factors taken into account in determining approval of special consideration for local government projects will include comparative revenue capacity, revenue efforts, and fiscal stress as reported by the Commission on Local Governments.

### General Guidelines

Matching cost requirements may be satisfied by allowable costs incurred from other grants or cash donations, or the value of party in-kind contributions, accrued during the period of the grant award.

- Neither costs nor the value of third party in-kind contributions may count towards satisfying a matching requirement of a grant agreement if they have been or will be counted towards satisfying a matching requirement of another grant agreement.
- Costs and third party in-kind contributions counting towards satisfying a matching requirement must be verifiable from the records of the grantee. These records must show how the value placed on third party in-kind contributions was derived. To the extent feasible, volunteer services will be supported by the same methods that the organization uses to support the allocability of regular personnel costs.

### Valuation of Third Party Donations

- Supply contributions will be valued at the market value at the time of donation.
- Use of loaned equipment or space in a building will be valued at the fair rental rate.

### Valuation of Donated Services

- (1) *Volunteer services* - Unpaid services provided to a Grantee by individuals will be valued at rates consistent with those ordinarily paid for similar work in the grantee's organization. If the grantee does not have employees performing similar work, the rates will be consistent with those ordinarily paid by other employers for similar work in the same labor market. A reasonable amount for fringe benefits may be included in the valuation.
- (2) *Employees of other organizations* - When an employer other than a grantee furnishes free of charge the services of an employee in the employee's normal line of work, the services will be valued at the employee's regular rate of pay exclusive of the employee's fringe benefits and overhead costs. If the services are in a different line of work, then the valuation for volunteer service described in the section above applies.

### Average Dollar Value of Volunteer Time

Volunteer hours may be counted as match at rates appropriate to the nature of the work being performed. Review “Valuation of Donated Service” guidelines on previous page.

If a grantee is not able to determine the volunteer match value based on the price paid for similar work within their organization, then DCR will accept the Virginia Average Hourly Value as determined by the Virginia Employment Commission. This rate is based on the national dollar value of volunteer time as released by the Independent Sector and posted on their web site, [www.independentsector.org](http://www.independentsector.org). The current web site used for annual updates to the Virginia rate is <http://www.vaservice.org/go/volunteer/statistics/>. The Virginia average volunteer value to be used for **adult volunteers** effective for July 2006 through June 2007 is **\$18.73 per hour**. This value includes 12 percent for fringe benefits. The appropriate standard value to be used for **children** and volunteers 16 and younger is the state **minimum wage of \$5.15** (or as established by the federal government).

### Value & Requirements for Use of Land as Match

- The reported value of any tract of land that will be used as match, whether acquired or donated, must be substantiated by an approved appraisal done no more than six months prior to the donation or acquisition.
- Property or easements used by private organizations as a match must also be protected by an easement co-held by a public entity. The co-holder of easements for private organizations must be a state agency or a local government jurisdiction.
- The grantee must include conditions to be placed on any acquired easements. This would include but not be limited to terms of the easement, the amount of development permitted (residential/agricultural, etc.) and any allowed or disallowed land management practices.

### Letters of Commitment / Confirmation of Match

A letter of commitment to verify match contributions toward a DCR grant, which is provided by an organization other than the project sponsor, is typically required for match contributions at or above \$10,000, but may be requested by DCR at anytime and for any amount of match. Providing letters of commitment with the grant application is encouraged. If necessary, official approval of match from a local government board or council can be sought after the application is submitted. Before grant agreements are finalized applicants must provide copies of contracts, award letters, letters of commitment, or other documentation necessary to confirm matching fund commitments.

### Targeted TMDL Impaired Segments & Eligible WQIF RFP Categories

The chart below provides a listing of impaired segments with Total Maximum Daily Loads (TMDL) by major river basin. The chart only lists segments with a TMDL that currently have a TMDL Implementation Plan or that have been prioritized for development of an Implementation Plan, and that are targeted for implementation activities to address nonpoint source pollutant loads that will be considered for funding under the 2007 WQIF Request for Proposals (RFP).

The chart includes the nonpoint source activities eligible for funding under the RFP, which may address the TMDL impairment. The four columns on the right side of the chart (Stormwater Management, Stream Restoration, Septic, and Mining) correspond to eligible funding activities described on pages 5-8 of the RFP. DCR recognizes that this chart may contain errors or that it may not be all-inclusive. WQIF project sponsors are encouraged to review materials on the DEQ TMDL website, <http://www.deq.virginia.gov/tmdl/>, such as draft and final implementation plans, to determine if a proposed project activity will address the TMDL load allocations.

Targeted TMDL Impaired Segments By Major River Basin (For NPS Impairments)				Eligible WQIF RFP Categories			
TMDL ID	TMDL Name	City/County:	Pollutant(s):	Storm-water Mgt.	Stream Restor-ation	Septic	Mining
<b>APPOMATTOX RIVER BASIN</b>							
VAC-J02R	Appomattox River Watershed (Spring Creek)	Prince Edward	E. Coli			YES	
VAC-J03R	Appomattox River Watershed (Little Sandy Creek)	Prince Edward	E. Coli			YES	
VAC-J04R	Appomattox River Watershed (Busch River)	Prince Edward	E. Coli			YES	
VAC-J05R	Appomattox River Watershed (Briery Creek)	Prince Edward	E. Coli			YES	
VAC-J06R	Appomattox River Watershed (Saylers Creek)	Prince Edward & Amelia	E. Coli			YES	
VAP-J08R	Appomattox River Watershed (Flat Creek)	Amelia	E. Coli			YES	
VAP-J09R	Appomattox River Watershed (Nibbs Creek)	Amelia	E. Coli			YES	
VAP-J11R	Appomattox River Watershed (Deep Creek)	Nottoway	E. Coli			YES	
VAP-J11R	Appomattox River Watershed (West Creek)	Nottoway & Amelia	E. Coli			YES	
<b>BIG SANDY RIVER BASIN</b>							
VAS-Q03R	Knox Creek	Buchanan	Fecal Coliform	YES	YES	YES	YES
VAS-Q03R	PawPaw Creek	Buchanan	Benthic		YES	YES	YES
<b>CHESAPEAKE BAY</b>							
VAT-V08E	Lynnhaven River Watershed	Virginia Beach	E. Coli	YES		YES	
VAT-C13E	Coastal: Occohannock	Accomack, Northampton	Shellfish	YES		YES	
<b>CHOWAN RIVER BASIN &amp; COASTAL</b>							
VASC-K14R	Chowan: Nottoway River	Lunenburg	E. Coli			YES	
VASC-K14R	Chowan: Big Hounds Creek	Lunenburg	E. Coli			YES	

TMDL ID	TMDL Name	City/County:	Pollutant(s):	Storm-water Mgt.	Stream Restoration	Septic	Mining
VASC-K14R	Chowan: Nottoway River	Nottoway & PE	E. Coli			YES	
VASC-K15R	Chowan: Little Nottoway River	Nottoway	E. Coli			YES	
VASC-K16R	Chowan: UT-Hurricane Branch	Nottoway	Benthic		YES		
VAP-K22R	Sappony Creek	Dinwiddie, Sussex	E. Coli			YES	
VAT-K24R	Mill Creek, Swamp	Isle of Wright	E. Coli			YES	
VAT-K24R	Rattlesnake Creek, Swamp	Isle of Wright	E. Coli			YES	
VAP-K25R	Raccoon Creek	Sussex, Southhampton	E. Coli			YES	
VAP-K32R	Cypress Swamp	Surry	E. Coli			YES	
VAT-C08E	Chowan Coastal: London Bridge and Canal	Virginia Beach	Fecal coliform	YES		YES	
VAT-K41R	Chowan Coastal: Milldam Creek	Virginia Beach	E. Coli	YES			
VAT-K42E	Chowan Coastal: Nawney Creek	Virginia Beach	Fecal coliform	YES		YES	
VAT-C08E	Chowan Coastal: West Neck Creek (Upper)	Virginia Beach	Fecal coliform	YES			
<b>CLINCH-POWELL RIVER BASIN</b>							
VAS-P01R	Upper Clinch River Watershed	Tazewell	Sediment	YES	YES		
VAS-P11R	Guest River; Crab Orchard Creek, Little Tom's Creek, Sepulcher Creek, Tom's Creek Watersheds	Wise	E. Coli, Sediment	YES	YES	YES	YES
<b>JAMES RIVER BASIN</b>							
VAV-H28R	Moores Creek Watershed	Albemarle, Charlottesville	Fecal Coliform	YES		YES	
VAP-H36R	Willis River Watershed	Cumberland	Fecal Coliform			YES	
I26	Looney Creek Watershed	Botetourt	E. Coli	YES		YES	
<b>NEW RIVER BASIN</b>							
VAW-N20R	Dodd Creek Watershed	Floyd	Fecal Coliform			YES	
VAW-N21R	Mill Creek Watershed	Montgomery	Fecal Coliform			YES	
VAW-N22R	Back Creek Watershed	Pulaski	E. Coli, Sediment	YES	YES	YES	
VAW-N22R	Stroubles Creek Watershed	Montgomery	Sediment	YES	YES		
VAS-N36R	Bluestone River Watershed	Tazewell	E. Coli, Sediment	YES	YES	YES	
VAS-N37R	Laurel Fork	Tazewell	Dissolved Oxygen, E.Coli, Sediment		YES	YES	YES
<b>POTOMAC RIVER BASIN</b>							
VAN-A02R	Catoctin Creek Watershed	Loudoun	Fecal Coliform			YES	
VAN-A12R	Four Mile Run Watershed	Arlington, Alexandria	Fecal Coliform			YES	
<b>RAPPAHANNOCK RIVER BASIN</b>							
VAN-E01R	Thumb et. al - Thumb Run Watershed	Fauquier	Fecal Coliform			YES	
VAN-E01R	Thumb et. al - Carter Run Watershed	Fauquier	E. Coli			YES	

TMDL ID	TMDL Name	City/County:	Pollutant(s):	Storm-water Mgt.	Stream Restor-ation	Septic	Mining
VAN-E02R	Thumb et. al - Great Run Watershed	Fauquier	E. Coli			YES	
VAN-E02R	Thumb et. al - Deep Run Watershed	Stafford, Fauquier	E. Coli			YES	
<b>ROANOKE RIVER BASIN</b>							
VAW-L08R	Upper Blackwater -North Fork Blackwater R	Franklin	Fecal Coliform, Phosphorus, Sediment		YES	YES	
VAW-L08R	Upper Blackwater -North Fork Blackwater River	Franklin	Fecal Coliform			YES	
VAW-L09R	Upper Blackwater -Middle Blackwater River	Franklin	Fecal Coliform			YES	
VAW-L09R	Upper Blackwater -Upper Blackwater River	Franklin	Fecal Coliform			YES	
VAW-L09R	Lower Blackwater - Maggodee Creek	Franklin	Fecal Coliform			YES	
VAW-L10R	Lower Blackwater - Lower Blackwater River	Franklin	Fecal Coliform			YES	
VAW-L11R	Lower Blackwater - Gills Creek	Franklin	Fecal Coliform			YES	
VAW-L13R	Old Womans Creek	Pittsylvania	E.Coli			YES	
VAW-L13R	Leesville Lake	Pittsylvania	E.Coli			YES	
VAW-L14R	Upper Pigg River	Franklin	E.Coli	YES		YES	
VAW-L14R	Story Creek	Franklin	E.Coli	YES		YES	
VAW-L15R	Big Chestnut Creek	Franklin	E.Coli			YES	
VAW-L16R	Lower Pigg River	Franklin	E.Coli			YES	
VAW-L17R	Snow Creek	Franklin	E.Coli			YES	
VAW-L17R	Snow Creek	Pittsylvania	E.Coli			YES	
VAW-L18R	Pigg River	Pittsylvania	E.Coli			YES	
VAW-L23R	Big Otter River - Sheeps Creek	Bedford	Fecal Coliform		YES	YES	
VAW-L25R	Big Otter River - Elk Creek	Bedford	Fecal Coliform		YES	YES	
VAW-L26R	Big Otter River - Machine Creek	Bedford	Fecal Coliform		YES	YES	
VAW-L26R	Big Otter River - Little Otter River	Bedford City	Fecal Coliform	YES	YES	YES	
VAW-L28R	Big Otter River - Big Otter River	Campbell, Pittsylvania	Fecal Coliform		YES	YES	
VAW-L34R	Falling River Watershed	Campbell	E. Coli	YES		YES	
VAC-L36R	Turnip Creek	Charlotte	E. Coli	YES		YES	
VAC-L37R	Club Creek	Charlotte	E.Coli	YES		YES	
VAC-L39R	Ash Camp Creek Watershed	Charlotte	E.Coli/ Sediment		YES	YES	
VAC-L39R	Twittys Creek Watershed	Charlotte	Sediment	YES	YES		
VAC-L40R	UT-Buffer Creek	Charlotte	E.Coli			YES	
<b>SHENANDOAH RIVER BASIN</b>							
VAW-B14R	Middle River	Augusta	E. Col	YES	YES	YES	



TMDL ID	TMDL Name	City/County:	Pollutant(s):	Storm-water Mgt.	Stream Restoration	Septic	Mining
VAV-V08R	Opequon Creek	Clarke, Winchester	E. Coli, Sediment	YES	YES	YES	
VAV-B09R	Abrams Creek	Frederick, Winchester	E. Coli, Sediment	YES	YES	YES	
VAV-B10R	Middle River	Augusta	E. Coli, Sediment	YES	YES	YES	
VAV-B13R	Moffett Creek	Augusta	E. Coli, Sediment	YES	YES	YES	
VAV-B14R	Christians Creek Watershed	Augusta	E. Coli, Sediment	YES	YES	YES	
VAV-B15R	Middle River	Augusta	E. Coli, Sediment	YES	YES	YES	
VAV-B15R	Polecat Draft	Augusta	E. Coli	YES		YES	
VAV-B19R	Mossy Creek	Rockingham	E. Coli/Benthic		Forestry Areas	YES	
VAV-B21R	Dry River Watershed	Rockingham	Nitrates, Fecal Coliform			YES	
VAV-B22R	Muddy Creek Watershed	Rockingham, Bridgewater	Nitrates, Fecal Coliform, Phosphorus, Sediment		YES	YES	
VAV-B24R	Long Glade Run	Rockingham	E. Coli			YES	
VAV-B25R	Cooks Creek Watershed	Rockingham, Dayton, Mt. Crawford	Fecal Coliform, Phosphorus, Sediment	YES	YES	YES	
VAV-B26R	Blacks Run Watershed	Rockingham, Harrisonburg	Fecal Coliform, Phosphorus, Sediment	YES	YES	YES	
VAV-B27R	Pleasant Run Watershed	Rockingham	Fecal Coliform, Phosphorus, Sediment		YES	YES	
VAV-B28R	Naked Creek Watershed	Augusta	Fecal Coliform			YES	
VAV-B29R	Mill Creek Watershed	Rockingham	Fecal Coliform, Phosphorus, Sediment	YES	YES	YES	
VAV-B30R	South River	Augusta	E. Coli			YES	
B39	Mill Creek	Page	E. Coli			YES	
B38	Hawksbill Creek Watershed	Page, Luray	E. Coli	YES		YES	
VAV-B45R	Holmans Creek Watershed	Rockingham, Shenandoah	Fecal Coliform, Phosphorus, Sediment	Yes	YES	YES	
<b>UPPER TENNESSEE RIVER BASIN</b>							
VAS-O05R	Three Creeks/MF Holston - Hall/Byers Creek	Washington	Fecal Coliform, Sediment		YES	YES	
VAS-O05R	Three Creeks/MF Holston - Cedar Creek	Washington	Fecal Coliform, Sediment	YES	YES	YES	
VAS-O05R	Three Creeks/MF Holston - Hutton Creek	Washington	Fecal Coliform, Sediment		YES	YES	
VAS-O07R	Little Creek Watershed	Washington, Bristol	Fecal Coliform	YES	YES	YES	
VAS-O07R	Beaver Creek Watershed	Washington, Bristol	E. Coli, Sediment	YES	YES	YES	